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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,648	09/04/2003	Akio Okamiya	P/4169-7	8323

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OSTROLENK FABER GERB & SOFFEN
1180 AVENUE OF THE AMERICAS
NEW YORK, NY 100368403

EXAMINER	
ZACHARIA, RAMSEY E	

ART UNIT	PAPER NUMBER
1773	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/656,648	OKAMIYA ET AL.
	Examiner	Art Unit
	Ramsey Zacharia	1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) *8-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 21-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/27/03; 2/26/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-7 and 21-40, drawn to an article, classified in class 428, subclass 421.

II. Claims 8-20, drawn to a method, classified in class 427, subclass 372.2.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the invention as claimed can be made by a materially different process such as laminating or adhering a preformed film comprising a fluorine-based polymer and about 100-400 ppm of a UV coloring agent to a surface.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Kourosh Salehi on 31 August 2004 a provisional election was made with traverse to prosecute the invention of Group I, claim1-7 and 21-40. Affirmation of this election must be made by applicant in replying to this Office action. Claims 8-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

6. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 23-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 23-36 are directed to bearing components comprising a surface having an oil repelling agent deposited thereon in which the oil repelling agent comprises a solvent. However, from the instant specification it appears bearing components are dried and baked after the application of the oil repelling agent which would drive off the solvent (see for example page 8, paragraph 35 and page 9 paragraph

37). Moreover, a purpose of the bearing device of the instant invention is minimizing the amount of outgas generated during use which is another indication that the oil repelling agent applied to the bearing device does not comprise a solvent.

Claim Language

9. For the purpose of examination, the bearing components of claims 23-36 is taken have a coating on a surface that is formed from a composition comprising about 100-400 ppm of a UV coloring agent, a fluorine-based polymer and a solvent (which is then dried) as opposed to a coating on a surface that comprises about 100-400 ppm of a UV coloring agent, a fluorine-based polymer and a solvent.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 23-36 are rejected under 35 U.S.C. 102(b) as anticipated by Miura et al. (JP 2001-27242).

Note: citations in this action refer to the paragraph numbers in the supplied English language translation of JP 2001-27242.

Miura et al. teach a dynamic pressure bearing device that may be used in a hard disc drive (paragraph 0003). An oil-repellent agent is applied to parts of the bearing device such as shafts

and sleeves (paragraph 0004). The oil-repellent agent comprises a fluorinated resin (corresponding to the instant fluorine-based polymer) in a solvent (paragraph 0026). A fluorescent agent (corresponding to the instant UV coloring agent), such as a member of the coumarin system, is added to the oil-repellent composition, thereby making it possible for the parts coated with the oil-repellent agent to be visually recognized immediately.

Miura et al. do not teach the concentration of the fluorescent agent or fluorinated resin in the oil-repellent agent composition. However, after applying the oil-repellent agent composition to the bearing device, the composition undergoes heat treatment, which will remove the solvent (paragraph 0026). This is the same process used in the instant invention to form the oil-repellent film (see for example page 8, paragraph 35 and page 9 paragraph 37). That is, while the concentrations of UV agent and fluorine-based polymer in the coating composition is based on the relative amount of solvent present in the composition, the concentrations in the resulting bearing device cannot be determined simply from the concentrations in the coating composition since the claims do not specify an amount of coating applied or other possible constituents in the coating composition. Since instant claims 23-36 are directed to an article (i.e. bearing component or fluid dynamic pressure bearing component) and not a composition, the concentration of constituents in the coating composition applied to the bearing is not the concentration of constituents in the final product. Therefore, the disclosure of Miura et al. reads on the invention of instant claims 23-36 since the coating of Miura et al. comprises a sufficient fluorinated polymer to repel oil and sufficient coumarin coloring agent to allow visual identification of the coating.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 1, 2, 5-7, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al. (JP 2001-27242).

Note: citations in this action refer to the paragraph numbers in the supplied English language translation of JP 2001-27242.

Miura et al. teach a dynamic pressure bearing device that may be used in a hard disc drive (paragraph 0003). An oil-repellent agent is applied to parts of the bearing device such as shafts and sleeves (paragraph 0004). The oil-repellent agent comprises a fluorinated resin (corresponding to the instant fluorine-based polymer) in a solvent (paragraph 0026). A fluorescent agent (corresponding to the instant UV coloring agent), such as a member of the coumarin system, is added to the oil-repellent composition, thereby making it possible for the parts coated with the oil-repellent agent to be visually recognized immediately. Miura et al. also teach that an organic pigment, such as an anthraquinone dye, may be added to the oil-repellent composition (paragraph 0027).

Miura et al. do not teach the concentration of the fluorescent agent in the oil-repellent agent composition. However, Miura et al. do teach that the coloring agent is added to allow for visual recognition of the coating. The amount of coloring agent directly affects the degree of coloration of the product to be colored. That is, the amount of coloring agent is a results

effective variable. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of fluorescent agent in the coating composition of Miura et al., since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2nd 272, 205 USPQ 215 (CCPA 1980).

14. Claims 1-7, 21-24, 27, 28, 30, 31, 34, 35, and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokouchi et al. (U.S. Patent 6,582,130) in view of Miura et al. (JP 2001-27242).

Yokouchi et al. is directed to a bearing device (column 1, lines 6-10). The device comprises a rust preventive film made of an oil-repellent material (column 5, lines 23-26). The rust preventive layer is formed by applying a rust preventive solution comprising as little as 0.5 wt% of a fluorine-based rust preventive dissolved in a diluent (column 5, lines 38-42). The fluorine-based rust preventive material is a fluorine substituted polymer (column 7, lines 8-25).

Yokouchi et al. do not teach the addition of a UV coloring agent or organic pigment to the rust preventive film.

Miura et al. is directed to fluorinated coatings applied to bearing devices. Miura et al. teach the incorporation of an organic dye or fluorescent agent, such as a compound of the coumarin system, into the coating to allow for immediate visual recognition of coated parts (paragraph 0027).

One skilled in the art would be motivated to add such a fluorescent agent to the rust preventive coating of Yokouchi et al. to provide a means for determining if a part has been

coated. Moreover, since the amount of coloring agent directly affects the degree of coloration of the product to be colored, the amount of coloring agent is a results effective variable. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of fluorescent agent in the coating composition of Miura et al., since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2nd 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 6 and 7, Miura et al. disclose the use of an organic coloring agent or a fluorescent agent with their coating for the same purpose, allowing for visual identification of the coating. It would be within the ability of one skilled in the art to use both a coloring agent and a fluorescent agent for applications in which multiple identifying means are desired.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones, can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramsey Zacharia
Primary Examiner
Tech Center 1700